

WHAT IS CLAIMED IS:

1. A method for producing multi-segment filter elements in the tobacco-processing industry, wherein the multi-segment filter elements each include a first filter segment and at least one second filter segment, the method comprising:

arranging a sleeve element in the first filter segment;

inserting the second filter segment into the sleeve element in the first filter segment; and

pulling the sleeve element out.

2. The method according to claim 1, further including compacting the material of the first filter segment prior to arranging the sleeve element.

3. The method according to claim 2, wherein the compacting step includes compacting the material of the first filter segment with a mandrel element.

4. The method according to claim 3, wherein the compacting step includes admitting the mandrel element with ultrasound.

5. The method according to claim 3, including using a mandrel element with a low-friction surface.

6. The method according to claim 5, wherein the using step includes using a mandrel coated with one of ceramic and electroplated chromium.

7. The method according to claim 3, wherein the compacting step includes piercing the first filter segment with the mandrel element which comes into with the sleeve element.

8. The method according to claim 7, wherein the piercing step includes piercing the first filter segment with a rotating movement.

9. The method according to claim 7, further including inserting the sleeve element into the filter segment while making contact with the mandrel element.

10. The method according to claim 1, further including arranging the second filter segment inside the sleeve element.

11. The method according to claim 1, further including securing the first filter segment in place before the material of the first filter segment is compacted.

12. The method according to claim 11, further including pulling out the sleeve element from the first filter segment and then releasing the first filter segment.

13. The method according to claim 12, further including transferring the respective filter elements to a conveying mechanism following the step of pulling out the sleeve element.

14. The method according to claim 13, wherein the conveying mechanism is a conveying drum.

15. The method according to claim 12, further including performing the foregoing steps on a conveying drum.

16. A multi-segment filter element produced by the method according to claim 1.

17. An apparatus for producing a multi-segment filter element in the tobacco-processing industry, the multi-segment filter element including a first filter segment and a second filter segment, comprising:

    a sleeve element;

    means for forming a cavity in the first filter element with the use of the sleeve element; and

    means for inserting the second filter segment into the cavity of the first filter segment.

18. The apparatus according to claim 17, wherein the sleeve element includes a receptacle for receiving the second filter segment.

19. The apparatus according to claim 14, further including a mandrel element for compacting the material of the first filter segment.

20. The apparatus according to claim 19, further including means for bringing the sleeve element and the mandrel element into contact.

21. The apparatus according to claim 16, further including means for applying ultrasound to the mandrel element while the mandrel is admitted into the first filter segment.

22. The apparatus according to claim 19, wherein the mandrel element has a low-friction surface.

23. The apparatus according to claim 22, wherein the low friction surface comprises one of a ceramic coating and an electroplated chromium coating.

24. The apparatus according to claim 17, further comprising a fixation element for securing the first filter segment.

25. The apparatus according to claim 24, further comprising a conveying means for producing filter elements on which the first filter segment is securing while the mandrel is inserted.

26. A method of producing multi-segment filters in the tobacco-processing industry, comprising utilizing an apparatus according to claim 17.